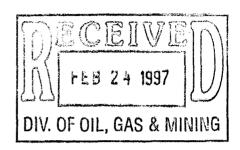
Petroglyph Operating Co., Inc.

P.O. Box 1839

Hutchinson, KS 67504-1839

February 17, 1997

Utah Division of Oil, Gas, & Mining Attn: Mr. Frank Matthews, Petroleum Engineer 1594 West North Temple Box 145801 Salt Lake City, UT 84114-5801



RE: APPLICATION FOR PERMIT TO DRILL UTE TRIBAL #30-02
NW/NE SEC. 30, T5S, R3W
DUCHESNE COUNTY, UTAH
LEASE NO. BIA 14-20-H62-3519
UTE TRIBAL LANDS

Dear Mr. Matthews:

Enclosed please find a copy of the Application for Permit to Drill and associated attachments for the referenced well.

Please address further communication regarding this matter (including approval) to:

Ed Trotter
P.O. Box 1910
Vernal, UT 84078
Phone # (801) 789-4120
Fax # (801) 789-1420

Sincerely

Ed Trotte

Petroglyph Operating Co., Inc.

Attachments

/EHT/dmt

SUBMIT IN TR **UNITED STATES**

(Other instructions on reverse side)

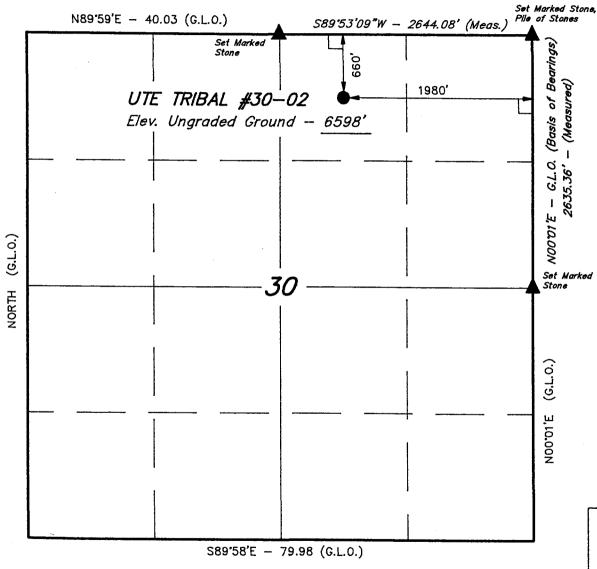
FORM APPROVED OMB NO. 1004-0136 Expires: February 28, 1995

5. LEASE DESIGNATION AND SERIAL NO.

DEPARTMENT OF THE INTERIOR

	BUREAU	14-20-н62-3519						
APPL	ICATION FOR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME						
1a. TYPE OF WORK	RILL 🗓	DEEPEN [7			UTE INDIAN		
b. TYPE OF WELL	MILE (A)	DELI EIA [
WELL X	GAS WELL OTHER		SINGLE ZONE	MULTIPLE Zone		8. FARM OR LEASE NAME, WEI	L NO.	
2. NAME OF OPERATOR						UTE TRIBAL	ı	
PETROGLYPH	OPERATING C	OMPANY, INC	•			9. API WELL NO.	-	
3. ADDRESS AND TELEPHONE NO					j.	#30-02		
P.O. BOX 60 4. LOCATION OF WELL (07, ROOSEVEL	T, UT 840	166	ante *\		10. FIELD AND POOL, O		
At surface			_	ents. ,	- 1-	ANTELOPE C		
660' At proposed prod. zo	FNL & 1980'	FEL NW/NE	;			11. SEC., T., R., M., OR E AND SURVEY OR AR	ea Ea	
_						Sec. 30, T	'5S, R3W	
14. DISTANCE IN MILES	AND DIRECTION FROM	EAREST TOWN OR POST	OFFICE*			12. COUNTY OR PARISH	13. STATE	
	SOUTHWEST O	F MYTON, UI	AH			DUCHESNE	UTAH	
15. DISTANCE FROM PROF LOCATION TO NEARES	RT.		16. NO. OF ACRES IN	LEASE 1	7. NO. 01	F ACRES ASSIGNED		
	ig. unit line, if any)		640			40		
 DISTANCE FROM PRO TO NEAREST WELL, 	DRILLING, COMPLETED,		19. PROPOSED DEPTH	2		Y OR CABLE TOOLS		
OR APPLIED FOR, ON TI 21. ELEVATIONS (Show w			5587'		ROT.	ARY 22. APPROX. DATE WOL		
6597.2'GRA		a garent	LANE NE CE	13 8		FEBRUARY 1		
23.	DED GROOND					1 BBROING		
		PROPOSED CASIN	G AND CEMENTING	PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FO			25	QUANTITY OF CEMENT		
12 1/4	8 5/8 5 1/2	24.0# 15.5#				x class "G" #/sx cellof		
7_7/8	3 1/2	13.5#	3367			POZMIX + 2%		
				I	•	TO 400' ABOV		
		CONFIDENT	111			TEREST (+ 10% EXCESS).		
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	1	"All in				O 200' ABOVE		
	·					ESH WATER IN CESS).	TERVALS (+	
				j.)% EA	CESS).		
PETROGLYPH (OPERATING CO	MPANY, INC.	WILL BE T	HE DESI	GNAT	ED		
OPERATOR OF						गाज्यक्वार	2 te Ce	
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	of Indian A			, Utan	$\parallel \parallel \parallel \parallel \parallel$	\ FEB 24 199	37 / /	
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N ABOVE SPACE DESCRIÈ		If proposal is to deepen, a				new productive zone. If pro	posal is to drill or	
4.	initional on subsumate sing	nights with the astred and tru	e vertical depths. Give bl	owout preventer	program, ii	any.		
SIGNED ZL	le solle	TITL	AGENT FOR	PETROG	LYPH	DATE 2-17	7-97	
(This space for Fede	eral or State office use)							
(21111) Space For Fede	143-013-31	10 27						
PERMIT NO.	/ NO-013-31	823	APPROVAL DATE					
	not warrant or certify that the	applicant holds legal or equ	itable title to those rights in	n the subject lease	which wou	ald entitle the applicant to conc	luct operations thereon.	
CONDITIONS OF APPROVA	L, IF ANY:	Λ.				1	1	
~	11/1/1/1	14/5)				クノつん	91	
APPROVED BY	10 XXX	TITLE _				DATE V VO	7	
	' 28 \	*See Instruc	tions On Reverse			1 '	ı	

T5S, R3W, U.S.B.&M.



LEGEND:

__ = 90' SYMBOL

= PROPOSED WELL HEAD.

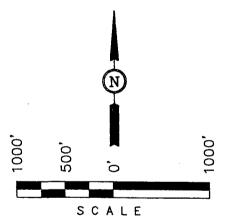
= SECTION CORNERS LOCATED.

PETROGLYPH OPERATING CO., INC.

Well Location, UTE TRIBAL #30-02, located as shown in NW 1/4 NE 1/4 of Section 30, T5S, R3W, U.S.B.&M. Duchesne County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE NORTHEAST CORNER OF SECTION 30, T5S, R3W, U.S.B.&M. TAKEN FROM THE DUCHESNE SE, QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6549 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR REGISTRATION NO. 161319

UINTAH ENGINEERING & LAND SURVEYING 85 SOUTH 200 EAST - VERNAL, UTAH 84078

(801) 789-1017

SCALE

1" = 1000'

PARTY
B.B. B.H. C.B.T.

WEATHER

COOL

DATE SURVEYED:
9-3-96

9-17-96

REFERENCES
G.L.O. PLAT

FILE
PETROGLYPH OPERATING CO., INC.

EIGHT POINT PLAN

UTE TRIBAL #30-02 NW/NE SEC. 30, T5S R3W DUCHESNE COUNTY, UTAH

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

FORMATIONS	DEPTH	SUBSEA
Mahogany Shale	2514	3646
"B" Marker	3606	2554
"X" Marker	4078	2082
Douglas Creek	4216	1944
"B" Limestone	4600	1560
B/Castle Peak Limestone	5150	1010
Basal Carbonate Limestone	5477	683
Total Depth	5587	573

Anticipated BHP

2400 psi

2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS FORMATIONS:

<u>Substance</u>	Formation	<u>Depth</u>	Subsea
Oil/Gas	Douglas Creek	4216	1944
Oil/Gas	B/Castle Peak	5150	1010
Other mineral zones	N/A		

3. PRESSURE CONTROL EQUIPMENT : BOP Schematic Diagram attached.

4. CASING PROGRAM:

		WITH SALLIT TACTOR						
HOLE SIZ	E INTERVAL	LENGTH	SIZE	WEIGHT	GRADE	<u>COLLAPS</u>	E BURST 1	ENSILE
12 1/4	0' - 250'	250'	8 5/8	24.0 #	J-55	1370 PSI	2950 PSI	263,000#
7 7/8	0' - 5587'	5587'	5 1/2	15.5 #	M-50	3650 PSI	4550 PSI	186,000#

MINIMUM SAFETY FACTOR

All casing will be new or inspected.

EIGHT POINT PLAN

UTE TRIBAL #30-02 NW/NE SEC. 30, T5S R3W DUCHESNE COUNTY, UTAH

5. MUD PROGRAM

INTERVAL	MUD TYPE
0' - 250'	Air
250' - 4000'	Air/Mist & Aerated Water
4000' - TD	Air/3% KCL water or KCL substitute
TD	Gel/polyacrylamide plolymer w/5-10% LCM

Sufficient mud inventory will be maintained on location during drilling to handle any adverse conditions that may arise.

6. <u>VARIANCE REQUESTS:</u>

- A. Petroglyph Operating Co., Inc. requests a variance to regulations requiring a straight run blooie line.
- B. Petroglyph Operating Co., Inc. requests a variance to regulations requiring an automatic ignitor or continuous pilot light on the blooie line.

7. **EVALUATION PROGRAM**:

Logs:	Mud Logging	T.D. to base of surface csg.
	Compensated Density-Compensated Neutron Log	T.D. to base of surface csg.
	Dual Laterolog - Micro-SFL	T.D. to base of surface csg.
	Numar (Magnetic Resonance Imaging Log)	@ Geologists discretion

Cores: None Programmed DST': None Programmed

Completion: To be submitted at a later date.

8. ABNORMAL CONDITIONS:

None anticipated.

EIGHT POINT PLAN

UTE TRIBAL #30-02 NW/NE SEC. 30, T5S R3W DUCHESNE COUNTY, UTAH

9. STANDARD REQUIRED EQUIPMENT:

- A. Choke Manifold
- B. Kelly Cock
- C. Stabbing Valve
- D. Visual Mud Monitoring

10. HAZARDOUS CHEMICALS:

No chemicals subject to reporting under SARA title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in associaton with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in associaton with the drilling of this well.

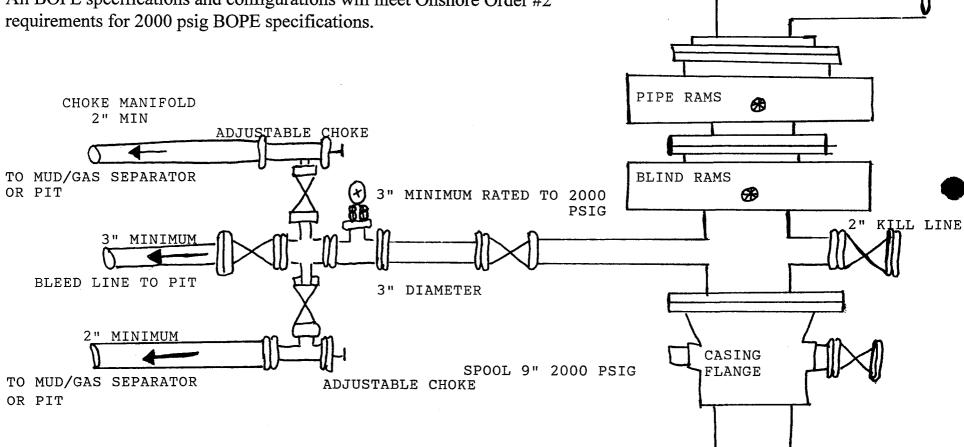
(Attachment: BOP Schematic Diagram)

2000 PSIG DIAGRAM

BOTH RAMS ARE 2000 PSIG RATED. CASING FLANGE IS 9" 2000 PSIG RATED. **BOPE 9" 2000 PSIG**

TESTING PROCEDURE:

- 1. BOPE 's will be tested with a professional tester to conform to Onshore Order #2 with retest every 14 days.
- 2. Blind rams will be tested to rated working pressure, 2000 psig
- 3. Casing will be tested to 0.22 psi/ft. or 1500 psig. Not to exceed 70% of burst strength, whichever is greater.
- 4. All lines subject to well pressure will be pressure tested to the same pressure as blind & pipe rams.
- 5. All BOPE specifications and configurations will meet Onshore Order #2 requirements for 2000 psig BOPE specifications.



ROTATING

FLOW LINE

HEAD

CONDITIONS OF APPROVAL FOR THE SURFACE USE PROGRAM OF THE APPLICATION FOR PERMIT TO DRILL

Company/Operator: Petroglyph Operating Co., Inc.

Well Name & Number: <u>Ute Tribal #30-02</u> Lease Number: <u>BIA 14-20-H62-3519</u>

Location: 660' FNL & 1980' FEL NW/NE, Sec. 30, T5S R3W

U.S.B.&M., Duchesne County, Utah

Surface Ownership: Ute Indian Tribe

NOTIFICATION REQUIREMENTS

Location Construction - forty-eight (48) hours prior to construction of location and access roads.

Location Completion - prior to moving on the drilling rig.

Spud Notice

- at least twenty-four (24) hours prior to spudding the

well.

Casing String and

Cementing

- twenty-four (24) hours prior to running casing and

cementing all casing strings.

1

BOP and related

Equipment Tests

- twenty-four (24) hours prior to running casing and

tests.

First Production

Notice

- within five (5) business days after new well begins

or production resumes after well has been off production for more than ninety (90) days.

For more specific details on notification requirements, please check the Conditions of Approval for Notice To Drill and Surface Use Program.

THIRTEEN POINT SURFACE USE PROGRAM

1. EXISTING ROADS

- A. See attached Wellsite Plats showing directional reference stakes on location, and attached TOPO Map "B" showing access to location from existing road.
- B. The proposed well site is located approximately 20.7 miles southwest of Myton, Utah See attached TOPO Map "A".
- C. Refer to attached Topographic Map "A" showing labeled access route to location.
- D. Existing roads will be maintained and repaired as necessary. No off lease Right-of-Way will be required.

2. PLANNED ACCESS ROAD

- A. The access road will be approximately 250 feet in length. See attached TOPO Map "B".
- B. The access road has a 30 foot ROW w/18 foot running surface.
- C. Maximum grade on access road will be 8%
- D. No turnouts will be required.
- E. Road drainage crossings shall be of the typical dry creek drainage crossing type.
- F. No culverts, bridges or major cuts & fills will be required.
- G. The access road will be dirt surface.
- H. No gates, cattleguards or fences will be required or encountered.

New or reconstructed roads will be centerlined - flagged at time of location staking.

All travel will be confined to existing access road Right-of-Way. Access roads and surface disturbing activities will conform to standards outlined in the Bureau of Land Management and Forest Service Publication: Surface Operating Standards For Oil & Gas Exploration and Development, (1989).

The road shall be upgraded to meet the standards of the anticipated traffic flow and all-weather road requirements. Upgrading shall include ditching, drainage, graveling, crowning, and capping the

roadbed as necessary to provide a well-constructed safe road.

Prior to upgrading, the road shall be cleared of any snow cover and allowed to dry completely. Traveling off the 30 foot Right-of- Way will not be allowed.

Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossings nor shall the drainages be blocked by the roadbed. Erosion of drainage ditches by run off water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided.

As operator, Petroglyph Operating Co., Inc. shall be responsible for all maintenance on cattleguards, or gates associated with this oil and/or gas operation.

3. LOCATION OF EXISTING WELLS WITHIN A ONE MILE RADIUS OF PROPOSED WELL LOCATION

- A. Water wells None
- B. Abandoned wells None
- C. Temporarily abandoned wells None.
- D. Disposal wells None.
- E. Drilling wells None.
- F. Producing wells 6*
- G. Shut in wells None
- H. Injection wells None(*See attached TOPO map "C" for location)

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. ON WELL PAD

- 1. Tank batteries None
- 2. Production facilities-To be submitted later
- 3. Oil gathering lines None

- 4. Gas gathering lines-None
- 5. Injection lines None
- 6. Disposal lines None
- 7. Surface pits None

B. OFF WELL PAD

- 1. Proposed location of attendant off pad flowlines shall be flagged prior to archaeological clearance.
- 2. A 4 1/2" OD steel above ground production pipeline will be laid approximately 1630' from proposed location to a point in the SW/NE of Section 30, T5S, R3W, where it will tie into Petroglyph Operating Co., Inc.'s existing facility at the Ute Tribal #30-07 tank battery. Proposed pipeline crosses Ute Tribe lands, thus a Right-of-Way grant will be required. See attached TOPO Map D showing pipeline route.
- 3. Proposed pipeline will be a 4 1/2" OD steel, welded line laid on the surface.
- 4. Protective measures and devices for livestock and wildlife will be taken and/or installed where required.

If storage facilities/tank batteries are constructed on this lease, the facility/battery or the well pad shall be surrounded by a containment dike of sufficient capacity to contain, at a minimum, the entire contents of the largest tank within the facility/battery, unless more stringent protective requirements are deemed necessary by the authorized officer.

The production facilities will be placed on the Ute Tribal #30-07 location.

All permanent (on site for six months or longer) structures constructed or installed (including pumping units) will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities required will be painted within 6 months of installation. Facilities required to comply with O.S.H.A.

(Occupational Safety and Health Act) will be excluded. The required paint color is Desert Brown.

5. LOCATION & TYPE OF WATER SUPPLY

- A. Water supply will be from Target Trucking's Roosevelt Brine Storage and/or Target's water source in SE 1/4, Sec. 1, T 4S, R 5W Duchesne County, Utah (State water right #43-10152). All water will come from a non-depletable source.
- B. Water will be hauled by Target Trucking.
- C. No water well will be drilled on lease.

6. SOURCE OF CONSTRUCTION MATERIAL

- A. All construction material for this location and access road will be of native borrow and soil accumulated during the construction of location.
- B. All construction material will come from Ute Tribal Land.
- C. No mineral materials will be required.

7. METHODS OF HANDLING WASTE DISPOSAL

A. METHODS AND LOCATION

- 1. Cuttings will be confined in the reserve pit.
- 2. A portable toilet will be provided for human waste during the drilling and completion of the well. Disposal will be at the Vernal sewage disposal plant.
- 3. Burning will not be allowed. Trash and other waste material will be contained in a wire mesh cage and disposed of at an approved waste disposal facility.
- 4. Produced waste water will be confined to a lined pit or storage tank for a period not to exceed 90 days after initial production. During the 90 day period, an application for approval of a permanent disposal method and location, together with the required water analysis, will be submitted for the AO's approval.

- 5. All chemicals will be disposed of at an authorized disposal site. Drip pans and absorbent pads will be used on drilling rig to avoid leakage of oil to pit.
- B. Water from drilling fluids and recovered during testing operations will be disposed of by either evaporating in reserve pit or be removed and disposed of at an authorized disposal site.
 Introduction of well bore hydrocarbons to reserve pit will be avoided by flaring them off in flare pit at time of recovery.

Burning of trash will not be allowed. All trash must be contained in a trash cage and hauled away to an approved disposal site at the completion of the drilling activities.

On BIA administered land:

allow discharge of liquids.

All reserve pits will be lined with either native clay, commercial bentonite or plastic sufficient to prevent seepage. (If a plastic nylon reinforced liner is used, it shall be torn and perforated after the pit dries and before backfilling of the reserve pit).

A 12 mill liner shall be installed in the reserve pit.

To protect the environment:

If the reserve pit is lined the operator will provide the BIA with a chemical analysis of the fluids in that pit no later than 90 days after the well completion to determine the method for final reclamation of the reserve pit. If the elemental concentrations shown by the chemical analysis exceeds the requirements described by part II, Standards of Quality for Waters of the State,

Wastewater Disposal Regulations, State of Utah Division of Health, the contents and liner will be removed and disposed of at an authorized disposal site.

To protect the environment (without a chemical analysis) reserve pits will be constructed so as not to leak, break, or

Storage tanks will be used if drill sites are located on tribal

irrigable land, flood plains, or on lands under crop production. After first production, produced waste water will be confined to a lined pit or storage tank for a period not to exceed ninety (90) days. During the 90 day period, in accordance with NTL-2B, an application for approval of a permanent disposal method and location, along with required water analysis, shall be submitted for the AO's approval. Failure to file an application within the time allowed will be considered an incident of noncompliance.

8. ANCILLARY FACILITIES

A. No airstrips or camps are planned for this well.

9. WELL SITE LAYOUT

- A. Refer to attached well site plat for related topography cuts and fills & cross sections.
- B. Refer to attached well site plat for rig layout and soil material stockpile location as approved on On-site.
- C. Refer to attached well site plat for rig orientation parking areas, and access road.

The reserve pit will be located on the Southwest side of the location. The flare pit will be located downwind of the prevailing wind direction on the Southwest side of the location, a minimum of 100 feet from the well head and 30 feet from the reserve pit fence.

The stockpiled topsoil will be stored on the North end.

Access to the well pad will be from the Northeast.
N/A Diversion ditch(es) shall be constructed on the
side of the location (above/below) the cut slope, draining to
the
N/A Soil compacted earthen berm(s) shall be placed on the
side(s) of the location between the
N/A The drainage(s) shall be diverted around the sides of the well pad location
N/A The reserve pit and/or pad locations shall be constructed long and
narrow for topographic reasons
X Corner No. 8 will be rounded off to minimize the fill.

FENCING REOUIREMENTS

All pits will be fenced according to the following minimum standards:

- A. 39 inch net wire shall be used with at least one strand of barbed wire on top of the net wire. (barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence).
- B. The net wire shall be no more than 2 inches above the ground. The barbed wire strand shall be 3 inches above the net wire. Total height of the fence shall be at least 42 inches.
- C. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- D. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16'.
- E. All wire shall be stretched by using a stretching device before it is attached to the corner posts.

The reserve pit fencing will be on the three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until clean-up.

Each existing fence to be crossed by the access road shall be braced and tied off before cutting so as to prevent slacking of the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BIA or SMA specifications. A cattleguard with an adjacent 16 foot gate shall be installed in any fence where a road is to be regularly travelled. If the well is a producer, the cattleguards (shall/shall not) be permanently mounted on concrete bases. Prior to a new road, crossing any fence located on federal land, or any fence between federal land and private land, the operator will contact the BIA, who will in turn contact the grazing permittee or owner of said fence and offer him/her the opportunity to be present when the fence is cut in order to

satisfy himself/herself that the fence is adequately braced and tied off.

10. PLANS FOR RESTORATION OF SURFACE

A. PRODUCING LOCATION

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash, and junk not required for production.

Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with CFR 3162.7-1.

If a plastic nylon reinforced liner is used, it shall be torn and perforated before backfilling of the reserve pit.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 120 days from the date of well completion (weather permitting). Before any dirt work takes place, the reserve pit will be completely dry and all cans, barrels, pipe, fluid, and hydrocarbons, will be removed.

Contact appropriate surface management agency for required seed mixture.

B. <u>DRY HOLE/ABANDONED LOCATION</u>

At such time as the well is plugged and abandoned, the operator will submit a subsequent report of abandonment and BIA will attach the appropriate surface rehabilitation conditions of approval.

ON BIA Administered lands:

Abandoned well sites, roads, or other disturbed areas will be restored to near their original condition. This procedure will include: (a) reestablishing irrigation systems where applicable, (b) reestablishing soil conditions in irrigated fields in such a way as to ensure cultivation and harvesting of crops and, (c) ensuring revegetation of the disturbed areas to the specifications of the Ute Indian Tribe or the BIA at the time of abandonment.

11. SURFACE OWNERSHIP

Access road:

Ute Indian Tribe

Location:

Ute Indian Tribe

12. OTHER INFORMATION

A. Petroglyph Operating Co., Inc. will inform all persons in the area who are associated with this project that they are subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator will immediately stop work that might further disturb such materials, and contact the AO. Within five working days the AO will inform the operator as to:

-whether the materials appear eligible for the National Register of historic Places;

the mitigation measures the operator will likely have to undertake before the site can be used.

-a time frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wished, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials that may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that required mitigation has been completed, the operator will then be allowed to resume construction.

B. As operator, Petroglyph Operating Co., Inc. will control noxious weeds along Right-of-Ways for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds will be obtained from the BIA,

or the appropriate County Extension Office. On BIA administered land, a Pesticide Use proposal shall be submitted, and given approval, prior to the application of herbicides or other pesticides or possible hazardous chemicals.

C. Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on Tribal Lands after the conclusion of drilling operations or at any other time without BIA authorization. However, if BIA authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

On BIA administered land:

Operator's employees, including subcontractors, will not gather firewood along roads constructed by operators. If wood cutting is required, a permit will be obtained from the Forestry Department of the BIA pursuant to 25 CFR 169.13 "Assessed Damages Incident to Right-of-Way authorization". All operators, subcontractors, vendors, and their employees or agents may not disturb saleable timber (including firewood) without a duly granted wood permit from the BIA Forester.

If the surface rights are owned by the Ute Indian Tribe and mineral rights are owned by another entity, an approved right-of-way will be obtained from the BIA before the operator begins any construction activities. If the surface is owned by another entity and the mineral rights are owned by the Ute Indian Tribe, rights-of-way will be obtained from the other entity.

All roads constructed by operators on the Uintah and Ouray Indian Reservation will have appropriate signs. Signs will be neat and of sound construction. They will state: (a) that the land is owned by the Ute Indian Tribe, (b) the name of the operator, (c) that firearms are prohibited to all non-Ute Tribal members (d) that permits must be obtained from the BIA before cutting firewood or other timber products, and (e) only authorized personnel permitted. All well site locations on the Uintah and Ouray Indian Reservation will have an appropriate sign indicating the name of the operator,

the lease serial number, the well name and number, the survey description of the well (either footage or the quarter-quarter section, the section, township, and range).

<u>Addit</u>	ional Surface Stipulations								
N/A	No construction or drilling activities shall be conducted between								
	and	because of							
N/A	_No surface occupancy will be	allowed within 1,000 feet of any sage							
	grouse strutting ground.								
N/A	_No construction or exploration activities are permitted within 1.5								
	mile radius of sage grouse stru	tting grounds from April 1 to June 30.							
N/A	_There shall be no surface distu	rbance within 600 feet of live water							
	(includes stock tanks, springs,	and guzzlers).							
N/A	_No cottonwood trees will be re	emoved or damaged.							
N/A	_Pond will be constructed accor	rding to BLM specifications							
		of the location, as flagged							
	on onsite.								
LESS	EE'S OR OPERATOR'S REPRI	ESENTATIVE AND CERTIFICATION							
	PERMITTING	OPERATIONS							
	Ed Trotter	Vince Guinn							
	1620 West 750 North	P.O. Box 607							
	1020 (1000 /00 1000	11012011007							

Vernal UT 84078

Fax # (801) 789-1420

Telephone # (801)789-4120

All lease/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approval plan of operations, and any applicable Notice to Lessees. Petroglyph Operating Co., Inc. is fully responsible for the actions of their subcontractors. A copy of these conditions will be furnished to the field representative to insure compliance.

Roosevelt, UT 84066

Fax # (801) 722-9145

(801) 722-2531

A copy of the approved APD and ROW grant, if applicable, shall be on location during construction of the location and drilling activities.

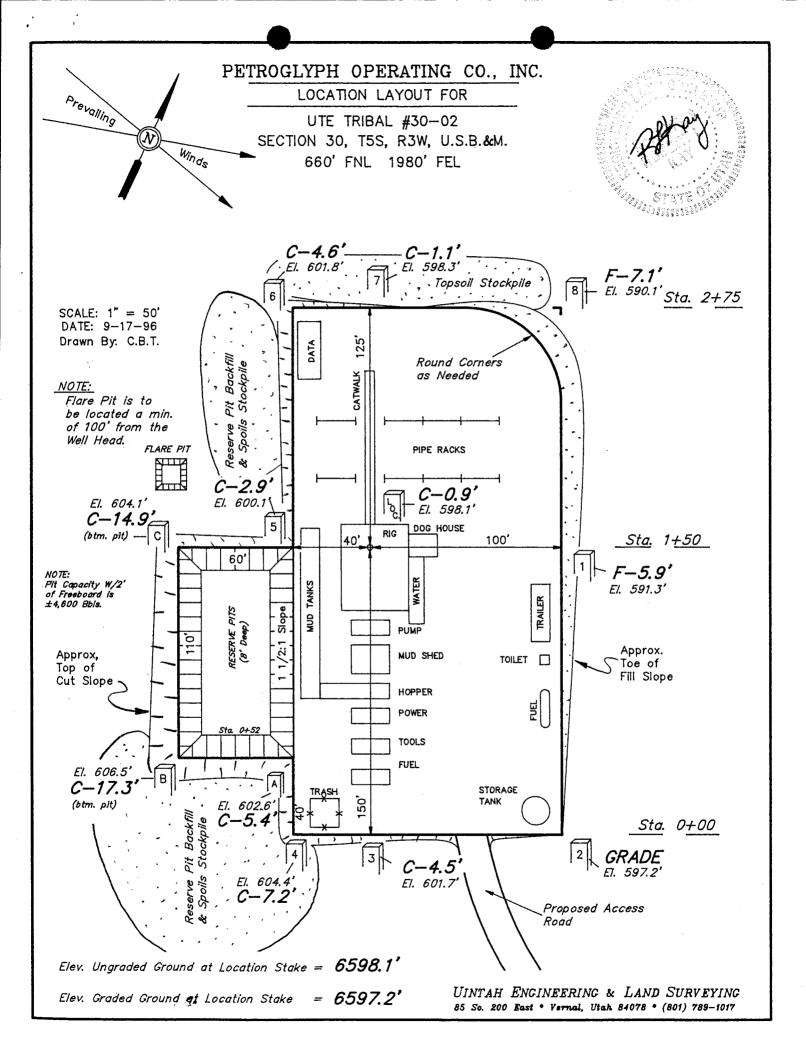
The BIA Office shall be notified upon site completion prior to moving on the drilling rig.

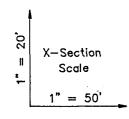
Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in the Plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Petroglyph Operating Co., Inc. and its contractors and sub-contractors in conformity with this Plan and the terms and conditions under which it is approved.

Date

13





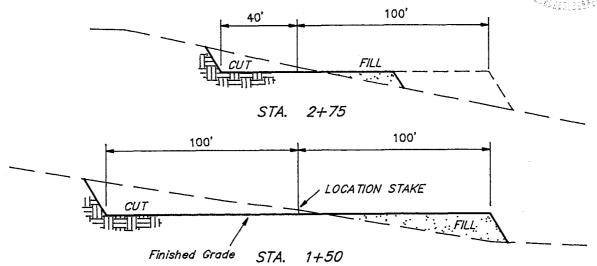
PETROGLYPH OPERATING CO., INC.

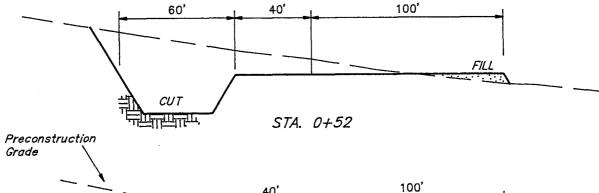
TYPICAL CROSS SECTIONS FOR

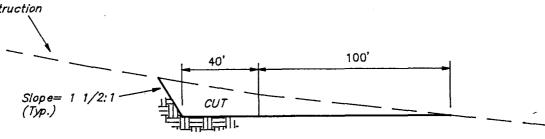
UTE TRIBAL #30-02 SECTION 30, T5S, R3W, U.S.B.&M. 660' FNL 1980' FEL

DATE: 9-17-96 Drawn By: C.B.T.









STA. 0+00

Topsoil should not be Stripped Below Finished

Stripped Below Finished Grade on Substructure Area.

APPROXIMATE YARDAGES

(12") Topsoil Stripping = 1,670 Cu. Yds.

Remaining Location = 4,020 Cu. Yds.

TOTAL CUT = 5,690 CU.YDS.

FILL = 3.150 CU.YDS.

EXCESS MATERIAL AFTER

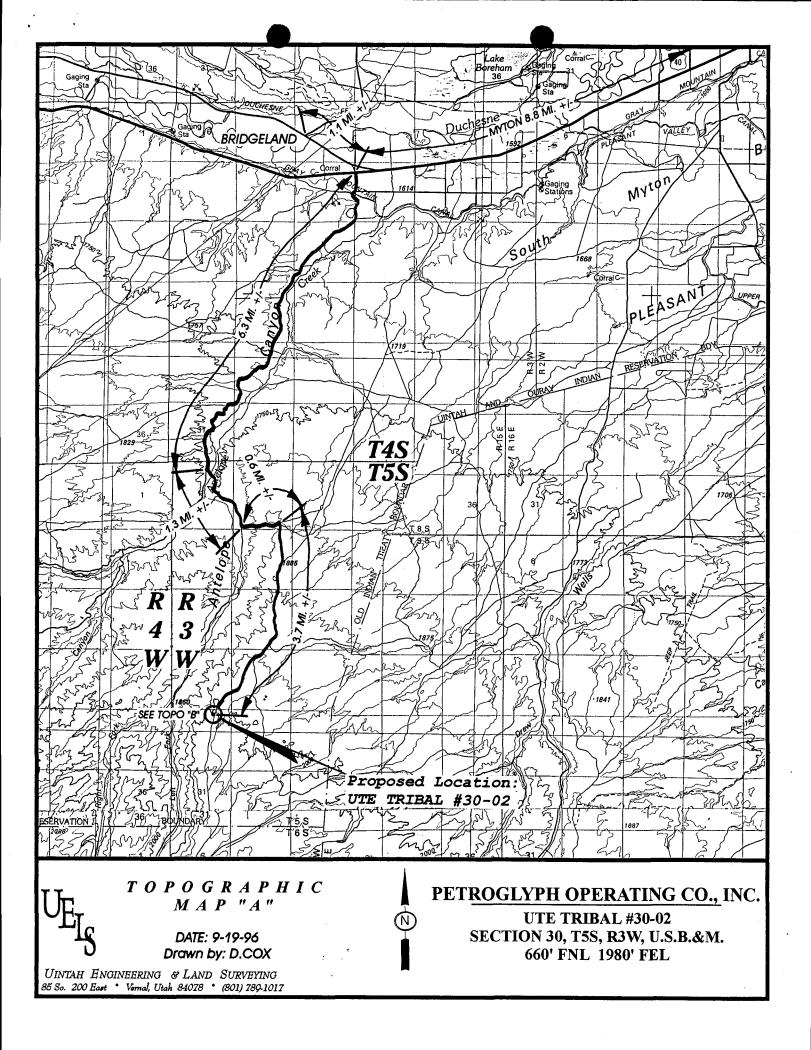
NOTE:

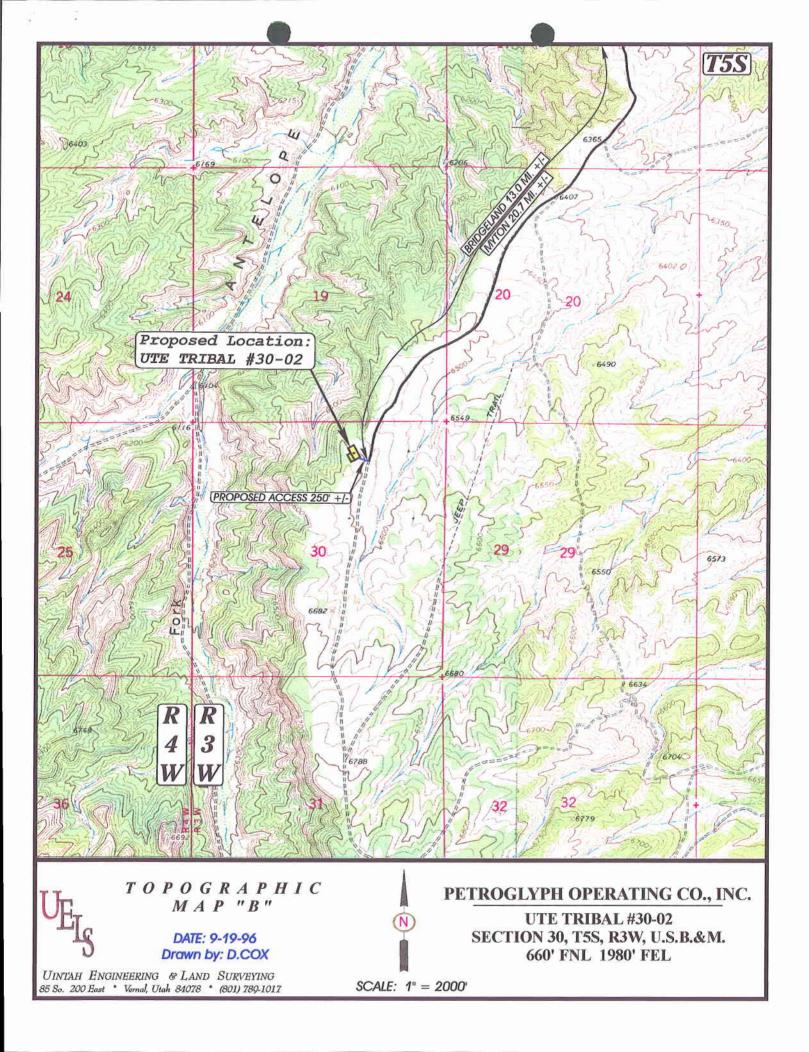
5% COMPACTION = 2,370 Cu. Yds. Topsoil & Pit Backfill = 2,370 Cu. Yds.

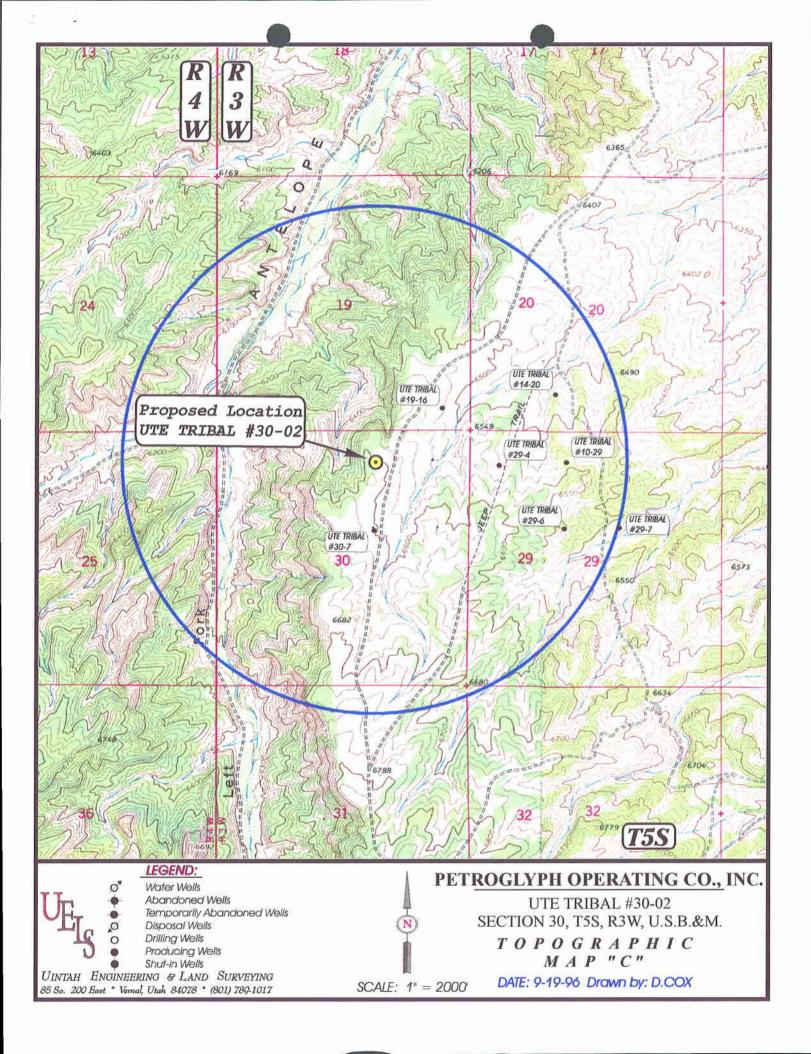
Topsoil & Pit Backfill (1/2 Pit Vol.)

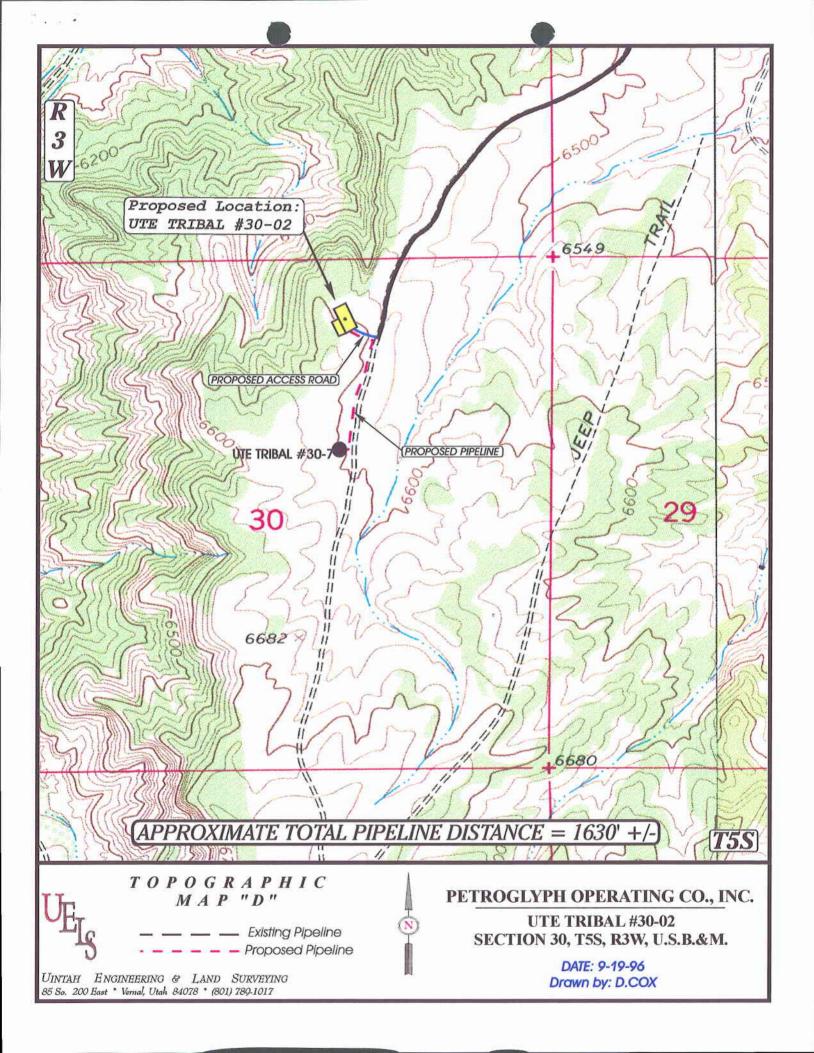
EXCESS UNBALANCE = 0 Cu. Yds. (After Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING 86 So. 200 East * Vernal, Utah 84078 * (801) 789-1017









WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 02/24/97 API NO. ASSIGNED: 43-013-31823 WELL NAME: UTE TRIBAL 30-02 OPERATOR: PETROGLYPH OPERATING (N3800) PROPOSED LOCATION: INSPECT LOCATION BY: / / NWNE 30 - T05S - R03W SURFACE: 0660-FNL-1980-FEL TECH REVIEW | Initials | Date BOTTOM: 0660-FNL-1980-FEL DUCHESNE COUNTY Engineering ANTELOPE CREEK FIELD (060) Geology LEASE TYPE: IND LEASE NUMBER: 14-20-H62-3519 Surface PROPOSED PRODUCING FORMATION: GRRV RECEIVED AND/OR REVIEWED: LOCATION AND SITING: ✓ Plat R649-2-3. Unit: Bond: Federal [] State[] Fee[] (Number ______ & 0 4556) <u></u> R649-3-2. General. μ Potash (Y/N) $\overline{\mu}$ Oil shale (Y/N) ____ R649-3-3. Exception. √ Water permit ___ Drilling Unit. Board Cause no: (Date: ____ Date: COMMENTS: STIPULATIONS:

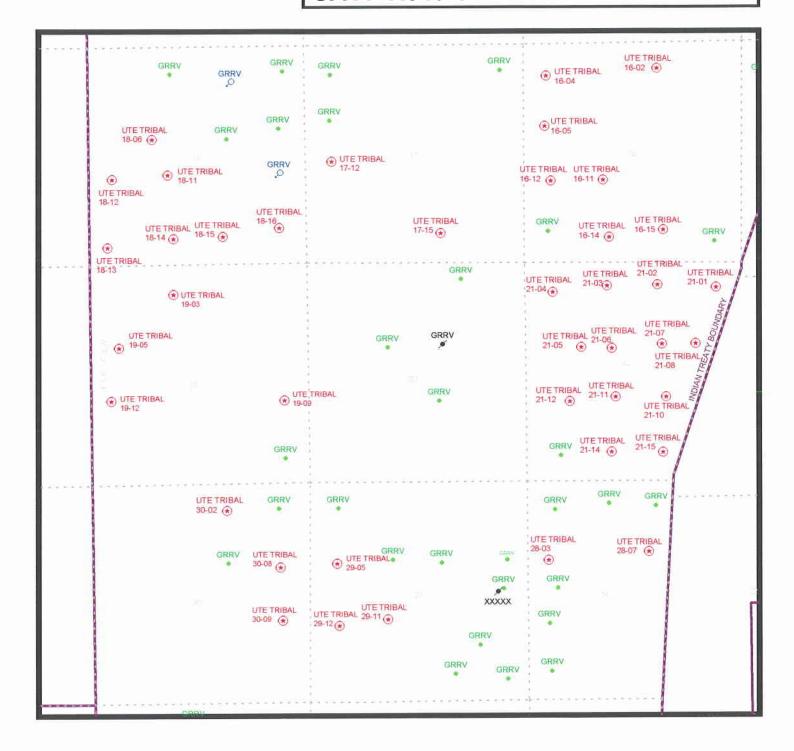
OPERATOR: PETROGLYPH

FIELD: ANTELOPE CREEK (060)

SEC. TWP. RNG: 16, & 30 T5S, R3W

COUNTY: DUCHESNE

UAC: R649-3-2



PREPARED:

DATE: 25-FEB-97

Michael O. Leavitt Governor Ted Stewart Executive Director James W. Carter Division Director 1594 West North Temple, Suite 1210 Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (Fax) 801-538-7223 (TDD)

February 26, 1997

Petroglyph Operating Company, Inc. P.O. Box 607 Roosevelt, Utah 84066

Re: Ute Tribal 30-02 Well, 660' FNL, 1980' FEL, NW NE, Sec. 30, T. 5 S., R. 3 W., Duchesne County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-31823.

Sincerely,

Associate Director

lwp

Enclosures

cc: Duchesne County Assessor

Bureau of Land Management, Vernal District Office

Operator:	Petro	odTAby (<u>Operati</u>	ng Com	ipany,	<u>Inc.</u>	_		
Well Name & Number	:Ute]	Ute Tribal 30-02							
API Number:	43-01	L3-3182	3						
Lease:	14-20	D-H62-3	519				_		
Location: _NW N	E Sec.	30	т.	5 S.	R.	3 W.			

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements

Notify the Division within 24 hours following spudding the well or commencing drilling operations. Contact Jimmie Thompson at (801)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact R. J. Firth (801)538-5274 or Mike Hebertson at (801) 538-5333.

3. Reporting Requirements

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

APPROVED BY

SUBMIT IN TRI

FORM APPROVED

(July 1992)	UNIT	ED STATES	5	•	reverse si		Expires: February 28, 1995	
	DEPARTMENT	OF THE I	NTER	RIOR			5. LEASE DESIGNATION AND SERIAL NO.	
	BUREAU OF	14-20-Н62-3519						
ADDI	ICATION FOR P	FRMIT TO	DRILI	L OR DEE	PEN		6. IF INDIAN, ALLOTTER OR TRIBE NAME	
1a. TYPE OF WORK	- IOATION TOTAL						UTE INDIAN TRIBE	
	RILL 🛛	DEEPEN [7. UNIT AGREEMENT NAME	
b. TYPE OF WELL	GAS [.E []	8. FARM OR LEASE NAME, WELL NO.					
	WELL OTHER		ZO	ONE L	ZONE		UTE TRIBAL	
	ODDDAMING COL	ADANV TNI	^				9. API WELL NO.	
3. ADDRESS AND TELEPHONE NO	OPERATING COM	IPANI, IN	<u> </u>				#30-02	
DO BOY 6	O7. ROOSEVELT.	. UT 840	066	DECE	NIE)	10. FIELD AND POOL, OR WILDCAT	
4. LOCATION OF WELL (At surface	07, ROOSEVELT	in accordance wi	th any 8	State requiremen	its.*)		ANTELOPE CREEK	
	FNL & 1980' F	EL NW/N	E	FEB 18	3 1997	•	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA	
At proposed prod. ze							Sec. 30, T5S, R3W	
		DESCRIPTION OF DOS	m offic	m\$			12. COUNTY OR PARISH 13. STATE	
	AND DIRECTION FROM NEAR			-			DUCHESNE UTAH	
20.7 MILES 15. DISTANCE FROM PRO	SOUTHWEST OF	MITON, U	16. NO	O. OF ACRES IN	LEASE		OF ACRES ASSIGNED	
LOCATION TO NEARE PROPERTY OR LEASE	ST LINE, FT. 660'		6	40		TOT	HIS WELL 40	
(Also to nearest di	eig, unit line, it any)		L	ROPOSED DEPTH		20. ROTA	RY OR CABLE TOOLS	
TO NEAREST WELL, OR APPLIED FOR, ON T	DRILLING, COMPLETED,		5	587'	•	ROT	ARY	
21. ELEVATIONS (Show w	hether DF, RT, GR, etc.)		··				22. APPROX. DATE WORK WILL START*	
6597.2'GRA	DED GROUND						FEBRUARY 1997	
23.		PROPOSED CAS	ING ANI	D CEMENTING	PROGRAM	A.		
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER F	FOOT SETTING DEPTH			QUANTITY OF CEMENT		
12 1/4	8 5/8	24.0#		250'			$sx class "G" + 2% CaCl_2$	
7 7/8	5 1/2	15.5#		5587'		+ 1/4	#/sx celloflake.	
			50/		50/50	POZMIX + 2% GEL + 10% TO 400' ABOVE ALL ZONES		
	·I			•		OF T	NTEREST (+ 10% EXCESS).	
						LIGH	r CEMENT (11 PPG +) +	
		•				LCM S	TO 200' ABOVE OIL SHALE	
					• *		RESH WATER INTERVALS (+	
						5% E	XCESS).	
						CT CN13/	##D	
PETROGLYPH	OPERATING COM	PANY, INC	. WI	ILL BE T	HE DE	SIGNA.	red	
OPERATOR OF	THE SUBJECT	MELL ONDE	K BC	טא # מעכ	4550	•	om to great the state of the st	
	oivision of Oi	1 (250 2	nd N	Minina			WECKING ELVI	
pc: Utan 1	of Indian Af	fairs. Fo	ort I	Duchesne	, Uta	h		
Bureau Bureau	cibe, Fort Duc	hesne, Ut	ah				[] HAR 10 1997	
/ 006 11	. 1007 1010 1	-					() (10 10 10 1)	
						1	and because a supplied to the supplied of the	
							d new productive zone. It proposal is to drill or , if any.	
IN ABOVE SPACE DESCRI	IBE PROPOSED PROGRAM: It rtiment data on subsurface location	f proposal is to deepen ons and measured and	, give dat true vertic	a on present produced a depths. Give bl	owout preve	nter program	if any.	
24.	X						A	
1/20	10 miles	T.	TLE A	GENT FOR	PETR	OGLYP	H DATE 2-17-97	
SIGNED	7							
(This space for Fed	deral or State office use)	OON	ية ا	IALIA	Physical D		CARLER A SECOND & CARLES OF	
PERM EN THE CASE	APPROVA.	<u> </u>	Ш	LANS.	JE A	35 2 2	WAL ATTACHED	
Application approval dos	es not warrant or certify that the ar	oplicant holds legal or e	equitable t	title to those rights i	n the subject	lease which w	would entitle the applicant to conduct operations thereon.	
CONDITIONS OF APPROV								
	20 106	1/2	Ass	sistant Field I	Manager	•	FEB 2 8 1997	
C. 1		///1.) 	

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the

*See Instructions On Reverse Side

- Mineral Resources

DATE

COAs Page 1 of 9 Well No.: Ute Tribal 30-02

CONDITIONS OF APPROVAL APPLICATION FOR PERMIT TO DRILL

Company/Operator: Petroglyph Operating Company Inc.								
Well Name & Number: <u>Ute Tribal 30-02</u>								
API Number: <u>43-013-31823</u>	_							
Lease Number: <u>14-20-H62-3519</u>								
Location: NWNE Sec. 30 T.5S B 3W								

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

COAs Page 8 of 9 Well No.: Ute Tribal 30-02

SURFACE USE PROGRAM

Conditions of Approval (COAs)

The Surface Use Conditions of Approval (COA's) are from the Bureau of Indian Affairs concurrence memorandum and the site specific Environmental Analysis.

The Ute Tribe Energy and Minerals Department is to be notified 48 hours prior to construction. A Tribal Technician shall monitor construction.

Fifty (50) foot wide Rights-Of-Way (ROWs) corridor shall be granted for the following:

Buried pipelines shall be limited to 15 feet wide; buried a minimum of 3 feet below the soil surface; and, monitored by a Tribal Technician.

Surface pipelines shall be limited to 13 feet and the ROW will not be bladed or cleared of vegetation.

Where surface lines parallel roads, the pipe may be welded on the road then lifted from the road to the ROW.

Where surface lines do not parallel roads, the pipe may be welded on the road or well site and then pulled cross country with suitable equipment. The surface pipeline ROW will not be used as an access road.

The constructed travel width of the access road shall be limited to 22 feet, except, as granted, for sharp curves or intersections.

Petroglyph Operating Company will assure the Ute Tribe that any/all contractors and any/all subcontractors have acquired a Tribal Business License and have access permits prior to construction.

All vehicular traffic, personnel movement, and construction and restoration operations shall be confined to areas examined, as referenced in report, and to the existing roadways and/or evaluated access routes.

All personnel shall refrain from collecting artifacts and from disturbing any significant cultural resources in the area.

Personnel from the Ute Tribe Energy & Minerals Department shall be consulted should cultural remains from subsurface deposits be exposed or identified during construction.

Petroglyph Operating Company will notify the Ute Tribe Energy & Minerals Resource Department upon completion of APD and ROW so a Tribal Technician can verify Affidavit of Completions.

COAs Page 2 of 9

Well No.: Ute Tribal 30-02

CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

A. DRILLING PROGRAM

1. <u>Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered</u>

Report <u>ALL</u> water shows and water-bearing sands to Tim Ingwell of this office **prior to setting the next casing string or requesting plugging orders**. Faxed copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

All usable water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a 2M system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

If an air compressor is on location and is being utilized to provide air for the drilling medium while drilling, the special drilling requirements in Onshore Oil and Gas Order No. 2, regarding air or gas drilling shall be adhered to. If a mist system is being utilized then the requirement for a deduster shall be waived.

3. Casing Program and Auxiliary Equipment

Surface casing shall have centralizers on the bottom three joints, with a minimum of one centralizer per joint.

As a minimum, the usable water shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the base of the usable water zone, identified at 612 ft. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

COAs Page 3 of 9 Well No.: Ute Tribal 30-02

4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

No chromate additives will be used in the mud system on Federal and Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.

5 .Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

All Drill Stem tests (DST) shall be accomplished during daylight hours, unless specific approval to start during other hours is obtained from the AO. However, DSTs may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e., lighting which is adequate for visibility and vaporproof for safe operations). Packers can be released, but tripping should not begin before daylight unless prior approval is obtained from the AO.

A cement bond log (CBL) will be run from the production casing shoe to \pm 412 ft. and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the AO.

6. Notifications of Operations

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

<u>Immediate Report</u>: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.

COAs Page 4 of 9 Well No.: Ute Tribal 30-02

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) days following the date on which the well is placed on production.

Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

A schematic facilities diagram as required by 43 CFR 3162.7-2, 3162.7-3, and 3162.7-4 shall be submitted to the appropriate District Office within thirty (30) days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-4.

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.

COAs Page 5 of 9 Well No.: Ute Tribal 30-02

7. Other Information

All loading lines will be placed inside the berm surrounding the tank battery.

All off-lease storage, off-lease measurement, or commingling onlease or off-lease will have prior written approval from the AO.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries and tested for meter accuracy at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

COAs Page 6 of 9 Well No.: Ute Tribal 30-02

In the event after-hours approvals are necessary, please contact one of the following individuals:

Ed Forsman

(801) 789-7077

Petroleum Engineer

Wayne P. Bankert

(801) 789-4170

Petroleum Engineer

(801) 789-1190

Jerry Kenczka Petroleum Engineer

BLM FAX Machine (801) 781-4410

COAs Page 7 of 9 Well No.: Ute Tribal 30-02

EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

Unused fracturing fluids or acids

Gas plant cooling tower cleaning wastes

Painting wastes

Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spend solvents, spilled chemicals, and waste acids

Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste

Refinery wastes

Liquid and solid wastes generated by crude oil and tank bottom reclaimers

Used equipment lubrication oils

Waste compressor oil, filters, and blowdown

Used hydraulic fluids

Waste solvents

Waste in transportation pipeline-related pits

Caustic or acid cleaners

Boiler cleaning wastes

Boiler refractory bricks

Incinerator ash

Laboratory wastes

Sanitary wastes

Pesticide wastes

Radioactive tracer wastes

Drums, insulation and miscellaneous solids.

COAs Page 9 of 9 Well No.: Ute Tribal 30-02

Before the site is abandoned the company will be required to restore the well site and ROW's to near their original state. The disturbed areas will be reseeded with desirable perennial vegetation.

Noxious weeds will be controlled on the well site and ROWs. If noxious weeds spread from the project area onto adjoining land, the company will also be responsible for their control.

Reserve pits will be lined with impervious synthetic liners. Prior to backfilling the reserve pit, all fluids will be pumped from the pit, into trucks, and hauled to approved disposal sites. When the reserve pit is backfilled the surplus oil, mud, etc., will be buried a minimum of three (3) feet below the soil surface.

A closed production system shall be used. Production fluids will be contained in leak proof tanks. All production fluids will be taken to and disposed of at approved disposal sites. The indiscriminate dumping of production fluids on roads, well sites, or other areas will not be allowed.

ENGINEERING EVALUATION APPLICATION FOR PERMIT TO DRILL

OPERATOR: Petroglyph Operating Company ___ DEVELOPMENT <u>X</u> WELL NUMBER: Ute Tribal 30-02 EXPLORATORY ____

LOC.: QtrQtr. NWNE Sec. 30 Twn. 58 Rng. 3W

LEASE: 14-20-H62-3519

CA/UNIT NAME/NO.: 14-20-H62-4650

MERIDIAN: USM COUNTY: **DUCHESNE** STATE: **UTAH**

BLOWOUT PREVENTION EQUIPMENT (BOPE) (ITEM 3)

ABHP = **2400** PROJECTED TVD = **5587 Ft.**

Operator's Gradient (ABHP/TVD) = __.4296 PSI/FT IS NOT appropriate and __DOES NOT coincide with the Anticipated Mud Weight (Item 6) for each drilled interval. The most credible ABHP is .4368 PSI/FT.

Rationale: The anticipated mud weight is 8.4 PPG

ASP = ABHP - (0.22 * TVD) ASP = 2440 - (0.22 * 5587)

ASP = **1211** PSI

Operator's proposed BOPE of a 2 M system (Item 3) EXCEEDS the ASP and is

therefore **ADEQUATE**.

Concerns: NONE

CASING PROGRAM (ITEM 4)

STRING	SIZE	GRADE	#/F	т.	CPL	Fj	РС	P:	Ĺ	LENGTH	WEIGH	ΤТ
SURFACE	8.625"	J-55	24.	0	ST&C	244K	1370	295	50	250′	6000#	
INT	N/A											
PROD.	5.5"	M-50	15.	5	ST&C	186K	3650	455	50	5587 ′	85,59	99#
PROD.	N/A											
	JOINT	Fj/Wt	OK	C	DLLAPSE	E Pc/(MV	V*0.052	'Ls	OK	BURST P	і/ВНР	OK
SURF.	<u>40.6</u> = <u>244</u>	1K/ <u>6000</u>	ОК	12	<u>1=1370</u>)/(_8.4	*0.052* <u>2</u>	<u>250</u>)	OK	<u>1.21</u> = <u>295</u>	0/2440	OK
INT.	=	/	-		=/	′ (*(0.052*)		=	/	
PROD.	2.17=186	5K/ <u>85899</u>	OK	1.5	50= <u>3650</u>)/(<u>8.4</u> *(0.052* <u>5</u>	5 <u>87</u>)	OK	<u>1.86</u> = <u>455</u>	0/2440	OK
	1.6 DE	RY 1.8 E	YOU		COLLA	PSE = >	1.125			BURST =	> 1.0	

Casing setting depths ARE across competent formations (see Items 1 & 2; Geologic Report) and therefore ARE appropriate. Casing design IS adequate. Concerns: NONE

EXPECTED HOLE VOL. MAX CMNT. CSG. ANN. SX OK? FILL-UP FILL-UP SIZE VOL. CMNT. YIELD CMNT. SIZE 103.2 1.15 155.3 surface surface OK 12.25 8.625 135 SURF. 3.62 TLas required ЮK PROD. + 7.875 + 5.5 + 968.2 +∔same PZ1.26 by COA's

All usable quality water and prospectivey valuable mineral and/or hydrocarbon zones as specified on the Geologic Report ARE adequately isolated and/or protected. See attached Cement Slurry and Calculated Fillup Worksheets.

Concerns:

NONE

DRILLING FLUID (MUD) PROGRAM (ITEM 6)

Proposed drilling fluid additives ARE nontoxic and compatible with formations likely to be encountered.

Concerns: NONE

TESTING, LOGGING, & CORING PROCEDURES (ITEM 7)

Adequate logs ARE proposed (See Geologic Report). Cement Bond evaluation tools **ARE NOT** proposed across critical zones. Special Drill Stem Test operations **ARE NOT** proposed.

Will require a cement bond log to be run to insure protection of Concerns: the resources.

CORRELATIVE RIGHTS

This well **IS** drilled in conformance with a spacing pattern acceptable to the Spacing Order In 4650 Agreement (Unit)

Concerns: NONE

SPECIAL DRILLING OPERATIONS

Air/Gas drilling - Hydrogen Sulfide - Directional/Horizontal For Example:

Drilling.

All air/gas drilling regulations will apply. Concerns:

MISCELLANEOUS

Any other facets of the proposed operation (Item 9).

Concerns: NONE

VARIANCES

All Variances granted **MEET** or **EXCEED** the minimum standards of

OOGO No. 2.

Concerns: NONE

RECOMMENDATIONS

SEE ATTACHED CONDITIONS OF APPROVAL.

Date February 20, 1997

DIVISION OF OIL, GAS AND MINING

CUNFIDENTIAL

SPUDDING INFORMATION

Name of Company: PETROGLYPH OPERATING
Well Name: UTE TRIBAL 30-02
Api No. <u>43-013-31823</u>
Section: 30 Township: 5S Range: 3W County: DUCHESNE
Drilling Contractor UNION
Rig # <u>16</u>
SPUDDED:
Date <u>3/14/97</u>
Time
How_ROTARY
Drilling will commence
Reported by D. INGRAM
Telephone #
Date: 3/18/97 Signed: JLT

FORM 7

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

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(

		REPORT OF	WATER ENCOUNTERED	DURING DRILLING	
1. Well name	e and number:	UTE TRI	BAC 30-02		
	er: <u>43-</u>				
API NUMO	er: <u>702</u>	<u> ۱۸۲۰-۲۱۷</u>		Da Date	
2. Well Locat	tion: QQ <u>NUIVE</u>	<u>عاک</u> Section <u>عاد</u>	Township 5.5 Range	W county Duch ESUE	
3. Well opera		,	perating Company, Inc		
Address:	T. D. B	6x 607			
	Koasei	ielt. LIT	84066	Phone: <u>C435</u>) 723	-2531
4. Drilling co	ntractor: <u>(Lui</u>	av Drill	ling		
Address:	P.D.	. Drawer	. 40		
,			, WV 26201	Phone: (304) 476	-4610
5. Water enc	ountered (attac	h additional pa	ges as needed):		
	DEF	PTH .	VOLUME	QUALITY	7
A No.	FROM	TO	(FLOW RATE OR HEAD)	(FRESH OR SALTY)	
	0	275	DRY		
·	275	368	14"+7"	FVE314-	
	368	1170	DRY		
	1170		1/4 × 7"		
		,			
			<u> </u>		
			A. A. A. B. A. B. A.		
•			<u> </u>		
6. Formation	tops: _		* tessing the testing the testing testing the testing		
	_				
	: -				
	· 				
If an analysis	has been made	e of the water o	encountered, please attach a cop	by of the report to this form.	
I hereby certi	ty that this repo	nt is true and c	complete to the best of my knowl	edge. Date: <u>3-17-9</u>	7
Name & Sign	ature:	Other		Title: Drille?	/
(7/93)		<u>.</u>		•	

Form 3160-4
(November 1983)
(formerly 0-330)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUBMIT IN	DUPLICATE
-----------	-----------

(See other instructions of

Form approved.
Budget Bureau No. 1004-0137
(Expires August 31, 1985)

5. LEASE DESIGNATION AND SERIAL NO. 14-20-H62-3519 6. IF INDIAN, ALOTTEE OR TRIBE NAME WELL COMPLETION OR RECOMPLETION REPORT AND LOG* Ute Indian Tribe Oil Well X Gas Well 1.a. TYPE OF WELL: 7. UNIT AGREEMENT NAME 14-20-H62-4650 b. TYPE OF COMPLETION: 8. FARM OR LEASE NAME Plug Back Diff. Reserv. Lite Tribal New Well X Deepen Workover___ Other 2. NAME OF OPERATOR WELL NO. Petroglyph Operating Company, Inc. 30-02 OF HELD AND POOL, OR WILDCAT 3. ADDRESS OF OPERATOR P.O. Box 1839, Hutchinson, KS 67504-1839 Antelope Creek 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* SEC., T., R., M., OR BLOCK AND 660' FNL & 1980' FEL NW NE SURVEY OR AREA At surface Sec. 30, T5S, R3W At top prod. interval reported below PERMIT NO. DATE ISSUED 12. County or Parish 13. State Utah 6035' RTD 43-013-31823 At total depth Duchesne 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 15. DATE SPUDDED 16. DATE T.D. REACHED 17. DATE COMPLETED (Ready to prod.) 19. ELEV. CASINGHEAD 3/14/97 3/21/97 4/19/97 6597 CABLE TOOLS 21. PLUG BACK T.D., MD & TVD 23. INTERVALS ROTARY TOOLS 20. TOTAL DEPTH, MD & TVD 22. IF MULTIPLE COMPL., HOW MANY 6035 5965 DRILLLED BY 25 WAS DIRECTIONAL SURVEY MADE 24. PRODUCING INTERVAL(S) OF THIS COMPLETION -- TOP, BOTTOM, NAME (MD AND TVD)* 26. TYPE ELECTRIC AND OTHER LOGS RUN 27. WAS WELL CORED CNL, AIT 28 CASING RECORD (Report all strings set in well) CEMENTING RECORD AMOUNT PULLED CASING SIZE WEIGHT, LB/FT. DEPTH SET (MD) HOLE SIZE 12-1/4" 225 sx Neat + 2% CaCl2 8-5/8" 24# 357 15.5# 5-1/2" 6006 7-7/8" 90 sx HiFill + 300 sx Thixotropic LINER RECORD DEPTH SET (MD) PACKER SET (MD) SIZE TOP BOTTOM (MD) SACKS CEMENT* SCREEN (MD) SIZE 2-7/8" 5755 31. PERFORATION RECORD (Interval, size and number) ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC 5667-5672 6 shots AMOUNT AND KIND OF MATERIAL USED DEPTH INTERVAL (MD) 5636-5641 6 shots 5667-5636 5372 gal fluid 28,000# prop 5270-5272 8 shots 5270-5272 3697 gal fluid 14,000# prop. 5143-5146 12 shots 5143-5146 3900 gal fluid 14,000# prop. 8400 gal fluid 50,900# prop 4730-4740 4730-4740 40 shots 4604-4610 4604-4610 24 shots 7028 gal fluid 44,000# prop. 4478-4484 24 shots 4478-4484 5777 gal fluid PRODUCTION 33.* PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) DATE FIRST PRODUCTION WELL STATUS (Producing or shut-in) Producing 5/2/97 pumping - 2 1/2 x 1 3/4 x 16 DATE OF TEST HOURS TESTED OIL - BBI. GAS - MCF. WATER - BBL. GAS-OIL RATIO CHOKE SIZE PROD'N FOR 5/14/97 24 TEST PERIOD 35 40 10 OIL GRAVITY - API (CORR.) WATER - BBL. FLOW. TUBING PRESS. CASING PRESSURE CALCULATED OIL - BBL GAS - MCF. 1000 24 HR. RATE 34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY Sold, used for fuel Dave Schreiner 35. LIST OF ATTACHMENTS 36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records 6/3/97 Geology/Petroleum Engineering Technician (See Instructions and Spaces for Additional Data on Reverse Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly or willfully to make to any department or agency of the Ur or representations as to any matter within its jurisdiction.

CONFIDENTIAL

JUN 06 1997

DIV. OF OIL, GAS & MINING

P.O. BOX 1839 HUTCHINSON, KS 67504-1839

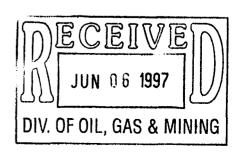
> ED FORSMAN BUREAU OF LAND MANAGEMENT U. S. DEPARTMENT OF THE INTERIOR 170 S. 500 EAST VERNAL, UT 84078

GLYPH OPERATING COMPANY, INC.

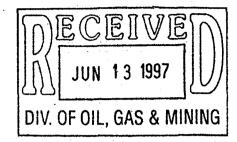
P.O. BOX 1839 HUTCHINSON, KS 67504-1839

> UTE INDIAN TRIBE TAX DEPT. ATTN: ANNETTE PARRIETTE P. O. BOX 70 FT. DUCHENSE, UT 84026

STATE OF UTAH DIVISION OF OIL, GAS & MINING P. O. BOX 145801 SALT LAKE CITY, UT 84114-5801



June 10, 1997



Vicky Dyson State of Utah Division of Oil, Gas & Mining 1594 W. North Temple, Ste.1210 Salt Lake City, UT 84114

CONFIDENTIAL

Ms. Dyson:

Enclosed please find the logs listed below for the wells located in Duchesne County, Utah.

Well Name Log
Ute Tribal 18-14 CNL, AIT
Ute Tribal 18-16 CNL, AIT

43 013 31823 5530 30

I have received your requests for logs on the 30-02, 20-09 and 29-05. These logs are unavailable at the moment as they are being copied. I have requested rapid service on the copying and will forward these to you as quickly as possible.

Please hold these in confidence as permitted in division guidelines. If you need further information, please do not hesitate to call me at 316-665-8500.

Sincerely,

April Menzies

Petroleum Engineering/Geology Technician

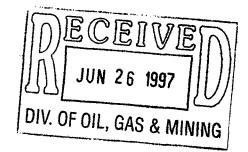
Spril Menzies

OGLYPHOperating Contrany, Inc.

June 23, 1997

Vicky Dyson State of Utah Division of Oil, Gas & Mining 1594 W. North Temple, Ste.1210 Salt Lake City, UT 84114

Ms. Dyson:



CONFIDENTIAL

Enclosed please find the logs listed below for the wells located in Duchesne County, Utah.

Well Name Ute Tribal 30-02

CNL & AIT 55 3W 30 43 013 31823

Please hold these in confidence as permitted in division guidelines. If you need further information, please do not hesitate to call me at 316-665-8500.

Sincerely,

April Menzies

Petroleum Engineering/Geology Technician

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

FORM 9

DIVISION OF OIL, GAS AND MINING	5.	LEASE DESIGNATION AND SERIAL NUMBER:
	i i	1420H624650
SUNDRY NOTICES AND REPORTS ON V		IF INDIAN, ALLOTTEE OR TRIBE NAME:
		<u>Jte Indian Tribe</u>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom- drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such	ole depth, reenter plugged wells, or to coroposals.	unit or ca agreement name: Jte Triball9-16
1. TYPE OF WELL OIL WELL GAS WELL OTHER		WELL NAME and NUMBER:
		See Below
2. NAME OF OPERATOR:	1 -	API NUMBER:
Petroglyph Operating Company 3. ADDRESS OF OPERATOR:		See Below FIELD AND POOL, OR WILDCAT:
P.O Box 607 cmy Roosevelt STATE UT ZIP 8406		Antelope Creek
4. LOCATION OF WELL		Anderope Greek
FOOTAGES AT SURFACE: Multiple/See Below	co	UNTY: Duchesne
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:	et.	ATE: UT
and the control of th	517	UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATU	RE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
NOTICE OF INTENT	PEN	REPERFORATE CURRENT FORMATION
	CTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start: CASING REPAIR	CONSTRUCTION	TEMPORARILY ABANDON
CHANGE TO PREVIOUS PLANS OPE	RATOR CHANGE	TUBING REPAIR
CHANGE TUBING PLU	S AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT CHANGE WELL NAME PLU	BACK	WATER DISPOSAL
(Submit Original Form Only)	<u> </u>	WATER SHUT-OFF
Date of work completion:	DUCTION (START/RESUME)	
	· •	Thansas
CONVERT WELL TYPE REC	DMPLETE - DIFFERENT FORMATION	Changes
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent de	ails including dates, depths, volumes, et	с.
Well Name API# S/T/R Ute 30-02 430133182300S1 30/05S/0	Type Statu	Entity# 09410
Ute 30-02 430133182300S1 30/05S/0	BW Oil POW	09410
This well was moved to the UTe Tribaa	19-16 Tank Batte	ery.
Ute 19-16	Oil POW	09397
NAME (PLEASE PRINT) Callie Peatross	TITLE Production	Clerk
Cantle Deartwork	04.25.02	
SIGNATURE VILLUS I	DATE 04-25-03	

(This space for State use only)

JUL-07-2003 MON 09:40 AM OIL, GAS & MINING

FAX NO. 801 359 3940

P. 02/03

FORM 6

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM Operator Account Number: <u>N.3860</u> Operator: Address: Phone Number: 435-722 -2531 zip 84066 Well 1 QQ Twp Rng County Well Name **API Number**

43013317950051 Action Code	Current Entity Number	New Entity Number	St WWSW	19 and Da	to	Entity Assignment Effective Date	_
C	12353	12210	4/10	11998	3	March-2003	
Comments:		6 TB.				1/9/03	v

API Number	Wall	Name	QQ	Sec	TWP	Rng	County	
43013319660001	Ute Tribal	19-14	BESW	19	<i>5</i> 5	3W	Duchesn-	<u>e</u> _
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		nt 	
C	12553	12210	'41	28/19	98	mar	rch-2003	<u>}</u> _
Comments:	w on 19-06	TB.		•		r	1/9/3	/

API Number	Well	iame	QQ	Sec	Twp	Rng	County	
1301331723005	UteTribal	30-02	NWNE	NWNE 36 55		3 3W Duches		
Action Gode	Current Entity . Number	New Entity Number	Spud Date		Entity Assignment Effective Date			
C	69410	69397	3/14/1997			March-2003		
Comments:	on 19-16TB.						7/9/03/	

ACTION CODES:

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a new entity
- Other (Explain in 'comments' section)

RECEIVED

JUL 0 7 2003

DIV. OF OIL, GAS & MINING

(5/2000)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8 999 18TH STREET - SUITE 200 **DENVER, CO 80202-2466** Phone 800-227-8917 http://www.epa.gov/region08

> 3 2007 JAN

Ref: 8P-W-GW

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Steve Wall, District Manager Petroglyph Energy, Inc. 4116 West 3000 So. Ioka Lane Roosevelt, UT 84066

43,013,31823

RE:

5S 3W 30 Additional Well to Antelope Creek Area Permit

UIC Permit No. UT20736-00000

Well ID: UT20736-07416

Ute Tribal No. 30-02, Duchesne County, Utah

Dear Mr. Wall:

The Petroglyph Energy, Inc.'s (Petroglyph) request to convert the former Green River Formation oil well Ute Tribal No. 30-02 to an enhanced recovery injection well in the Antelope Creek Waterflood project is hereby authorized by the U.S. Environmental Protection Agency (EPA) under the terms and conditions of the Authorization For Additional Well.

The addition of the proposed injection well, within the exterior boundary of the Uintah & Ouray Indian Reservation, is being made under the authority of title 40 Code of Federal Regulation §144.33 (c) and terms of the Antelope Creek Waterflood UIC Area Permit No. UT20736-00000. Unless specifically mentioned in the enclosed Authorization For Additional Well, the Ute Tribal No. 30-02 is subject to all terms and conditions of the UIC Area Permit UT20736-00000 as modified.

Please be aware that Petroglyph does not have authorization to begin injection operations into the well until all Prior to Commencing Injection requirements have been submitted and evaluated by the EPA, and Petroglyph has received written authorization from the Director to begin injection.

> Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY

RECEIVED

JAN 08 2007



Prior to receiving authorization to inject, the EPA requires that Petroglyph submit for review and approval the following: (1) the results of a Part I (Internal) mechanical integrity test (MIT), (2) a pore pressure calculation of the injection interval, (3) a completed EPA Form No. 7520-12 Well Rework Record.

The initial Maximum Allowable Injection Pressure (MAIP) for the Ute Tribal No. 30-02 well was determined to be <u>1625 psig.</u> UIC Area Permit UT20736-00000 also provides the opportunity for the permittee to request a change in the MAIP based upon results of a step rate test that demonstrates that the formation breakdown pressure will not be exceeded.

If you have any questions, please call Ms. Linda Bowling at (303) 312-6254 or 1.800.227.8917 (Ext. 6254). Please submit the required data to <u>ATTENTION: Linda Bowling</u>, at the letterhead address, citing <u>MAIL CODE: 8P-W-GW</u> very prominently.

Sincerely,

for Stephen S. Tuber

Joh N Thom

Assistant Regional Administrator Office of Partnerships and Regulatory Assistance

encl: Authorization For Conversion of An Additional Well EPA Form No. 7520-12 (Well Rework Record)

Prior to Beginning Injection Checklist

cc: without enclosures

Maxine Natchees, Acting Chairperson Uintah & Ouray Business Committee Ute Indian Tribe P.O. Box 190 Fort Duchesne, UT 84026

Chester Mills, Superintendent BIA - Uintah & Ouray Indian Agency P.O. Box 130 Fort Duchesne, UT 84026

Across d by the Uses Division of C., Gas and Mining FOR RECORD ONLY

cc: with enclosures

Mr. Kenneth Smith
Executive Vice President and Chief Operating Officer
Petroglyph Energy, Inc.
555 S. Cole Blvd
Boise, ID 83709

Shaun Chapoose, Director Land Use Department Ute Indian Tribe P.O. Box 460 Fort Duchesne, UT 84026

Gilbert Hunt Associate Director Utah Division of Oil, Gas, and Mining 1594 West North Temple - Suite 1220 Salt Lake City, UT 84114-5801

Fluid Minerals Engineering Office U.S. Bureau of Land Management-Vernal Field Office 170 South 500 East Vernal, Utah 84078

Lynn Becker, Director Energy and Minerals Department Ute Indian Tribe P.O. Box 70 Ft. Duchesne, UT 84026

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18TH STREET - SUITE 200
DENVER, CO 80202-2466
Phone 800-227-8917
http://www.epa.gov/region08

AUTHORIZATION FOR ADDITIONAL WELL

UIC Area Permit No: UT20736-00000

The Antelope Creek Waterflood Final UIC Area Permit No. UT20736-00000, effective July 12, 1994, authorizes injection for the purpose of enhanced oil recovery into multiple lenticular sand units which are distributed throughout the lower portion of the Green River Formation. On September 5, 2006 the permittee provided notice to the Director concerning the following additional enhanced recovery injection well:

Well Name:

EPA Well ID Number:

Location:

Ute Tribal 30-02

UT20736-07416

660 ft FNL & 1980 ft FEL NW NE Sec. 30 - T5S - R3W

Duchesne County, Utah.

Pursuant to 40 CFR §144.33, Area UIC Permit No. UT20736-00000 authorizes the permittee to construct and operate, convert, or plug and abandon additional enhanced recovery injection wells within the area permit. This well was determined to satisfy additional well criteria required by the permit.

This well is subject to all provisions of UIC Area Permit No. UT20736-00000, as modified and as specified in the Well Specific Requirements detailed below. This Authorization shall expire one year after the Effective Date unless the permittee has converted the well to injection or submits a written request to extend this Authorization prior to the expiration date.

This Authorization is effective upon signature.

Date: 1441 2 2007

Stephen S. Tuber

*Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

* The person holding this title is referred to as the Director throughout the Permit and Authorization

- - -, ..

WELL-SPECIFIC REQUIREMENTS

Well Name: <u>Ute Tribal 30-02</u> EPA Well ID Number: <u>UT20736-07416</u>

<u>Prior to commencing injection operations, the permittee shall submit the following information and receive written Authority to Inject from the Director:</u>

- 1. a successful Part I (Internal) Mechanical Integrity test (MIT);
- 2. pore pressure calculation of the proposed injection zone; and
- 3. completed Well Rework Record EPA Form No. 7520-12 and schematic diagram.

<u>Approved Injection Zone:</u> Injection is approved between the base of the Green River A Lime Marker, at approximately 4030 ft (KB)_{CBL}, to the top of the Basal Carbonate, at approximately 6033 ft (KB)_{CBL}.

<u>Maximum Allowable Injection Pressure (MAIP)</u>: The initial MAIP is <u>1625 psig</u>, based on the following calculation:

```
MAIP = [FG - (0.433)(SG)] * D, where FG = 0.80 \text{ psi/ft} SG = 1.009 D = \underline{4478 \text{ ft}} (top perforation depth KB) MAIP = 1625 \text{ psig}
```

UIC Area Permit No. UT20736-00000 also provides the opportunity for the permittee to request a change of the MAIP based upon results of a step rate test that demonstrates the formation breakdown pressure will not be exceeded.

Well Construction and Corrective Action: The following Corrective Action is required.

The cement bond log did not provide evidence that an effective barrier exist to prevent significant upward fluid movement through vertical channels adjacent to the injection well bore. Therefore the operator shall demonstrate Part II Mechanical Integrity within one hundred eighty (180) days after commencing injection and at least once every five (5) years thereafter using a temperature survey, noise log, oxygen activation log, or a radioactive tracer survey under certain circumstances.

The permit limits the injection zone to "the gross interval within the Green River Formation", which is between the approximate depths of 4030 ft and 6033 ft (KB)_{CBL}. Documentation for both procedures shall be submitted to the Director for review before authorization to inject will be permitted.

Tubing: No Corrective Action is required.

2-3/8" or similar size injection tubing is approved; the packer shall be set at a depth no more than 100 ft above the top perforation.

Corrective Action for Wells in Area of Review: No Corrective Action is required.

The following wells that penetrate the confining zone are within or proximate to a 1/4 mile radius around the Ute Tribal No. 30-02. This well was evaluated to determine if any corrective action is necessary to prevent fluid movement into USDWs:

Well: Ute Tribal No. 30-01 Location: Sec. 30 - T5S - R3W Well: Ute Tribal No. 30-02B Location: Sec. 30 - T5S - R3W Well: Ute Tribal No. 30-06 Location: Sec. 30 - T5S - R3W

Demonstration of Mechanical Integrity: The following Corrective Action is required.

A successful demonstration of Part I (Internal) Mechanical Integrity using a standard Casing-Tubing pressure test is required prior to injection and at least once every five (5) years thereafter. EPA reviewed the cement bond log and was unable to determine if the cement would provide an effective barrier to significant upward movement of fluids through vertical channels adjacent to the well bore pursuant to 40 CFR 146.8 (a)(2). Therefore, further demonstration of Part II (External) Mechanical Integrity is required within one-hundred and eighty (180) days after injection begins and every five (5) years thereafter.

Demonstration of Financial Responsibility: No Corrective Action is required.

The applicant has demonstrated financial responsibility in the amount of \$15,000 via a Surety Bond that has been reviewed and approved by the EPA.

Plugging and Abandonment: The following Action is required.

The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluids into or between USDWs. Tubing, packers, and any downhole apparatus shall be removed. Class A, C, G, and H cements, with additives such as accelerators and retarders that control or enhance cement properties, may be used for plugs; however, volume extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging after each plug is set. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. At a minimum, the following plugs are required:

- PLUG NO. 1: Set a cast iron bridge plug (CIBP) no more than 50 ft above the top perforation (located at 4478 ft (KB)) with a minimum 20 ft cement plug on top of the CIBP.
- PLUG NO. 2: Set a minimum 200 ft cement plug inside and backside (unless preexisting backside cement precludes cement-squeezing this interval) of the 5-1/2" casing across the Trona Zone and the Mahogany Shale, between approximately 2795 ft (KB) to 2995 ft (KB).

- PLUG NO. 3: Set a minimum 200 ft cement plug on the inside and backside (unless pre-existing backside cement precludes cement-squeezing this interval) of the 5-1/2" casing across the Green River, between approximately 1560 ft (KB) to 1760 ft (KB).
- PLUG NO. 4: Set a minimum 200 ft (KB) cement plug on the inside and backside (unless pre-existing backside cement precludes cement-squeezing this interval) of the 5-1/2" casing across the underground source of drinking water (USDW), between approximately 1239 ft (KB) and 1439 ft (KB).
- PLUG NO. 5: Set a minimum 50 ft cement plug on the backside of the 5-1/2" casing, across the surface casing shoe at 357 ft (KB) (unless pre-existing backside cement precludes cement-squeezing this interval.)
- PLUG NO. 6: Set a cement plug inside of the 5-1/2" casing, from at least 332 ft (KB) to 382 ft (KB).
- PLUG NO. 7: Set a cement plug on the backside of the 5-1/2" casing, from surface to a depth of at least 50 ft (KB).
- PLUG NO. 8: Set a cement plug inside of the 5-1/2" casing from surface to a depth of at least 50 ft (KB).

Cut off surface and 5-1/2" casing at least 4 ft below ground level and set P&A marker; submit Sundry Notices and all necessary data as required by the EPA and other regulatory agencies.

Reporting of Noncompliance:

- (a) Anticipated Noncompliance. The operator shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (b) <u>Compliance Schedules</u>. Reports of compliance or noncompliance with, or any progress on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than thirty (30) days following each schedule date.
- (c) Written Notice of any noncompliance which may endanger health or the environment shall be reported to the Director within five (5) days of the time the operator becomes aware of the noncompliance. The written notice shall contain a description of the noncompliance and its cause; the period of noncompliance including dates and times; if the noncompliance has not been corrected the anticipated time it is expected to continue; and steps taken or planned to prevent or reduce recurrence of the noncompliance.

Twenty-Four Hour Noncompliance Reporting:

The operator shall report to the Director any noncompliance which may endanger health or environment. Information shall be provided, either orally or by leaving a message, within twenty-four (24) hours from the time the operator becomes aware of the circumstances by telephoning 1.800.227-8917 and asking for the EPA Region 8 UIC Program Compliance and Enforcement Director, or by contacting the Region 8 Emergency Operations Center at 303.293.1788 if calling from outside EPA Region 8. The following information shall be included in the verbal report:

- (a) Any monitoring or other information which indicates that any contaminant may cause an endangerment to a USDW.
- (b) Any noncompliance with a Permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.

Oil Spill and Chemical Release Reporting:

The operator shall comply with all other reporting requirements related to oil spills and chemical releases or other potential impacts to human health or the environment by contacting the National Response Center (NRC) 1.800.424.8802 or 202.267.2675, or through the NRC website at http://www.nrc.uscg.mil/index.htm.

Other Noncompliance:

The operator shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted.

Other Information:

Where the operator becomes aware that he failed to submit any relevant facts in the Permit application, or submitted incorrect information in a Permit application, or in any report to the Director, the operator shall submit such correct facts or information within two (2) weeks of the time such information became known to him.

WELL-SPECIFIC CONSIDERATIONS

Well Name: Ute Tribal 30-02 EPA Well ID Number: UT20736-07416

Underground Sources of Drinking Water (USDWs): USDWs in the Antelope Creek Waterflood area generally may occur within the Uinta Formation, which extends from the surface to the top of the Green River Formation at approximately 1660 ft below ground surface. According to "Base of Moderately Saline Ground Water in the Uinta Basin, Utah, State of Utah Technical Publication No. 92," the base of moderately saline ground water may be found at approximately 491 ft below ground surface at this well location. Based on information reported by Petroglyph Operating Company in the cement bond log (CBL) submitted, the base of the USDW was found to be 1339 ft (KB) in the Ute Tribal 30-02 well. The cased hole cement log, shows the top of continuous casing cement at approximately 2270 ft and shows variable quality of the downhole cement. Therefore, EPA will require demonstration of Part II (External) Mechanical Integrity through the operation life of the well, and has amended the plugging and abandonment plan to include a cement squeeze plug outside of the casing across the base of USDW's at 1339 ft KB.

Confining Zone: The Confining Zone at this location is approximately 200 ft of interbedded limestone and shale between the depths of 3830 ft to 4030 ft (KB) which directly overlies the Injection Zone, based on correlation to the Antelope Creek Ute Tribal 04-03 well Type Log. Additional impermeable lacustrine shale beds above the Confining Zone provide for further protection for any overlying USDW.

Injection Zone: The Injection Zone at this well location is an approximately 2003 ft section of multiple lenticular sand units interbedded with shale, marlstone and limestone from the base of the Confining Zone at 4030 ft (KB) to the top of the Basal Carbonate Formation at 6033 ft (KB), based on correlation to the Antelope Creek Ute Tribal 04-03 well Type Log.

Well Construction: The CBL provided was not useful for the evaluation of cement bonding.

Surface Casing:

8-5/8" casing is set at 357 ft (KB) in a 12-1/4" hole, using 225 sacks

cement circulated to the surface.

Longstring Casing:

5-1/2" casing is set at 6006 ft (KB) in a 7-7/8" 6035 ft Total Depth hole

with a plugged back total depth (PBTD) of 5965 ft, cemented with 390

sacks cement.

Top of Cement:

2270 ft (KB) cbl

Perforations: top perforation: 4478 ft (KB)

Bottom perforation: 5672 ft (KB)

Wells in Area of Review (AOR): Construction and cementing records, including CBL as available, for one well in the 1/4 mile AOR that penetrated the confining zone was reviewed and found adequate to prevent fluid movement out of the injection zone and into USDWs.

Well: Ute Tribal No. 30-01 Casing Cement top: 2658 ft (KB) _{CBL}
Well: Ute Tribal No. 30-02B Casing Cement top: surface ft (KB) _{CBL}
Well: Ute Tribal No. 30-06 Casing Cement top: 240 ft (KB) _{CBL}

DEPARTMENT OF NATURAL RESOURCES							
	DIVISION OF OIL, GAS AND MINI	-	5. LEASE DESIGNATION AND SERIAL NUMBER: 1420H623519				
SUNDRY	NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tribal				
Do not use this form for proposals to drill ne	7. UNIT OF CA AGREEMENT NAME: 1420H624650						
1. TYPE OF WELL OIL WELL	8. WELL NAME and NUMBER: Ute Tribal 30-02						
2. NAME OF OPERATOR:			9. API NUMBER:				
Petroglyph Operating Com	pany, inc.		4301331823				
3. ADDRESS OF OPERATOR: P. O. Box 607	Roosevelr STATE Ut ZIP &	PHONE NUMBER: 4066 (435) 722-5304	10. FIELD AND POOL, OR WILDCAT: Antelope Creek				
4. LOCATION OF WELL	STATE ZIP	(100) / 22 000 1					
FOOTAGES AT SURFACE: 660' FI	NL 1980' FEL		COUNTY: Duchesne				
QTR/QTR, SECTION, TOWNSHIP, RANG	GE, MERIDIAN: NWNE 30 T5S R3	w	STATE: UTAH				
11. CHECK APPR	ROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA				
TYPE OF SUBMISSION		TYPE OF ACTION					
NOTICE OF INTENT	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION				
(Submit in Duplicate)	ALTER CASING [FRACTURE TREAT	SIDETRACK TO REPAIR WELL				
Approximate date work will start:	CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON				
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR				
	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE				
SUBSEQUENT REPORT	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL				
(Submit Original Form Only)	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF				
Date of work completion:	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	OTHER:				
	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION					
	<u> </u>						
This sundry is serving noti injection well from a produ has obtained approval to p	MPLETED OPERATIONS. Clearly show all perce that Petroglyph Operating Comcing well. This work is being perform the conversion on the Ute vill submit the necessary information.	ipany, Inc. (POCI) plans to conv ormed under our area UIC permi Tribal 30-02 from the EPA. Afte	ert the Ute Tribal 30-02 to an it number UT20736-06601. POCI er the conversion on the Ute Tribal				
		Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY					
NAME (PLEASE PRINT) Steve Wal	1	τιπ F Manager					

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DATE 1/10/2007

STATE OF UTAH

	!	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS AND MIN		ſ		SE DESIGNATION AND SERIAL NUMBER:	
SUNDRY NOTICES AND REPORTS ON WELLS						1420H623519 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Indian Tribe	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.						7. UNIT OF CA AGREEMENT NAME: 1420H624650	
1. TYPE OF WELL GAS WELL OTHER Injection well						8. WELL NAME and NUMBER: Ute Tribal 30-02	
2. N/	AME OF OPERATOR:		· · · · · · · · · · · · · · · · · · ·			NUMBER:	
Petroglyph Operating Company, Inc.						4301331823	
3. ADDRESS OF OPERATOR: P. O. Box 607 CITY Roosevelt STATE UT ZIP 84066						10. FIELD AND POOL, OR WILDCAT: Antelope Creek	
	OCATION OF WELL						
FC	DOTAGES AT SURFACE: 660' F	NL, 1980' FEL			COUNT	y: Duchesne	
Q.	TR/QTR, SECTION, TOWNSHIP, RAN	ige, meridian: NWNE 30 5S 3W	v		STATE:	UTAH	
11.	CHECK APP	ROPRIATE BOXES TO INDICATE	NATURE (OF NOTICE, REPOR	RT, OI	R OTHER DATA	
	TYPE OF SUBMISSION		T	PE OF ACTION			
	NOTICE OF INTENT	ACIDIZE [DEEPEN			REPERFORATE CURRENT FORMATION	
	(Submit in Duplicate)	ALTER CASING	FRACTURE	TREAT		SIDETRACK TO REPAIR WELL	
	Approximate date work will start:	CASING REPAIR	NEW CONST	RUCTION		TEMPORARILY ABANDON	
		CHANGE TO PREVIOUS PLANS	OPERATOR		빌	TUBING REPAIR	
		CHANGE TUBING	PLUG AND A			VENT OR FLARE	
V	SUBSEQUENT REPORT (Submit Original Form Only)	CHANGE WELL NAME	PLUG BACK			WATER DISPOSAL	
	Date of work completion:	CHANGE WELL STATUS	_	N (START/RESUME)	Ц	WATER SHUT-OFF	
	2/1/2007	COMMINGLE PRODUCING FORMATIONS	=	ON OF WELL SITE	Ш	OTHER:	
		CONVERT WELL TYPE	RECOMPLE	TE - DIFFERENT FORMATION	· · · · ·		
On act EU	February 1. 2007 this tive in Antelope Creek. E tubing. The packer is	OMPLETED OPERATIONS. Clearly show all per well was converted to a water inject. The rods and tubing have been pusset at 4413' +/- KB. Packer fluid 28' to 4730', C5=4740' - 4744', C6=	ction well to ulled from th has been c =4879' - 488	support the ongoing is well. The injection reulated in the casin	secon strin g and ne.	g consists of 2 3/8". 4.7# J55	
NAME (PLEASE PRINT) Steve Wall			TITLE				
SIGN	ATURE SUM	Well	DATE	3/23/2007	· · · · ·		
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STATE OF UTAH

DEPARTMENT OF NATU DIVISION OF OIL, G	5. LEASE DESIGNATION AND SERIAL NUMBER: 1420H623519							
SUNDRY NOTICES AND	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Indian Tribe							
Do not use this form for proposals to drill new wells, significantly deepen exist drill horizontal laterals. Use APPLICATION FOR P	7. UNIT or CA AGREEMENT NAME: 1420H62450							
1. TYPE OF WELL OIL WELL GAS WELL	8. WELL NAME and NUMBER: Ute Tribal 30-02							
2. NAME OF OPERATOR:		9. API NUMBER:						
Petroglyph Operating Company, Inc. 3. ADDRESS OF OPERATOR:	4301331823 NUMBER: 10. FIELD AND POOL, OR WILDCAT:							
P. O. Box 607 CITY Roosevelt	5) 722-5304 Antelope Creek							
4. LOCATION OF WELL FOOTAGES AT SURFACE: 660' FNL 1980' FEL		COUNTY: Duchesne						
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNE 3	STATE:							
		UTAH						
11. CHECK APPROPRIATE BOXES 1		OTICE, REPORT, OR OTHER DATA						
TYPE OF SUBMISSION		F ACTION						
NOTICE OF INTENT	DEEPEN	REPERFORATE CURRENT FORMATION						
(Submit in Duplicate) ALTER CASING	FRACTURE TREAT NEW CONSTRUCTION	SIDETRACK TO REPAIR WELL ON TEMPORARILY ABANDON						
Approximate date work will start CASING REPAIR CHANGE TO PREVIOUS		— ·						
CHANGE TUBING	PLUG AND ABANDO							
SUBSEQUENT REPORT CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL						
(Submit Original Form Only) CHANGE WELL STATUS	<u>—</u>							
Date of work completion: COMMINGLE PRODUCIN	=							
7/24/2007 CONVERT WELL TYPE	<u> </u>	FERENT FORMATION						
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly show all pertinent details including	dates, depths, volumes, etc.						
First date of Injection July 24, 2007								
i not date of injection dary 24, 2007								
Accep	ted by the Divi sion of and Mining							
Utan	oivi sion on and Mining							
e Oil, Cas	COM ONLY							
FOH HE	CORD ONLY							
10								
NAME (PI EASE DRINT) Steve Wall	TITLE M	anager						
NAME (PLEASE PRINT) Steve Wall	anager							
SIGNATURE DATE 7/25/2007								
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